

U.S. Appl. No. 09/293,702
Reply to Office Action dated June 30, 2006

PATENT
450117-4866

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (Previously Presented) A method for determining access times of a plurality of segments of a plurality of broadcast objects in a broadcast channel using a unidirectional communication scheme in order to transmit the plurality of broadcast objects from a server side to a receiver side, each of the plurality of said segments of said plurality of broadcast objects are permitted to (i) have a different size, (ii) be segmented into smaller units in order to allow overlapped transmission or parallel transmission, (iii) be transmitted in a different repetitive pattern, and (iv) be transmitted in a broadcast cycle in different orders,

said method characterized in that each segment of a broadcast object of a current broadcast cycle includes a header defining a repetition distance which is the distance between a completed transmission of the current segment of the broadcast object and the next transmission of a next segment of the broadcast object, and therefore a next reception point in time of said next segment of said broadcast object is calculated from a current time value and said repetition distance.

2. (Previously Presented) The method according to claim 1, characterized in that said repetition distance specifies how many of the plurality of broadcast objects will be transmitted after a specific broadcast object until this specific broadcast object will be transmitted again.

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3. (Previously Presented) The method according to claim 1, characterized in that said repetition distance specifies how much data will be transmitted after a specific broadcast object until this specific broadcast object will be transmitted again.

4. (Previously Presented) The method according to claim 1, characterized in that said repetition distance specifies how much time it will take after a specific broadcast object is broadcast until this specific broadcast object will be transmitted again.

5. (Previously Presented) The method according to claim 2, characterized by an upper bound which specifies a maximum value for the repetition distance.

6. (Previously Presented) The method according to claim 2, characterized in that the repetition distance specifies an absolute value in the form of a repetition time.

7. (Previously Presented) The method according to claim 1, characterized in that on the server side a broadcast cycle generator describes a broadcast cycle as a sequence of segments and a sequence of objects, the sequence of objects describing which objects belong to the broadcast cycle and how often each object is included in the broadcast cycle, and the sequence of segments describing the transmission order of segments of all objects.

8. (Original) The method according to claim 7, characterized in that a parameter specifying an allocated bitrate for the transmission of objects is added if the repetition distance is encoded as a time value.

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9. (Previously Presented) The method according to claim 7, characterized in that in a DAB system the broadcast cycle generator receives object parameters from a server application block, calculates the repetition distance of each object and selects segments for the transmission.

10. (Previously Presented) The method according to claim 1, characterized in that a broadcast object decoder retrieves a unique identifier of an object and the repetition distance and obtains the current time value from a time service, and an absolute value for a reception point in time is calculated from the repetition distance and the current time value and is stored together with the object.

11. (Previously Presented) The method according to claim 10, characterized in that a data object requester allows to request certain objects by an object identifier and allows to request the next reception point in time of an object.

12. (Previously Presented) The method according to claim 11, characterized in that the data object requester can use the repetition distance as repetition time information for managing a cache.

13. (Previously Presented) The method according to claim 1, characterized in that the method is used in a progress indicator.

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14. (Previously Presented) A method for transmitting a plurality of segments of a plurality of broadcast objects from a server side to a receiver side in a broadcast channel using a unidirectional communication scheme wherein each of the plurality of said segments of said plurality of broadcast objects are permitted to (i) have a different size, (ii) be segmented into smaller units in order to allow overlapped transmission or parallel transmission, (iii) be transmitted in a different repetitive pattern, and (iv) be transmitted in a broadcast cycle in different orders, said method comprising the steps of:

attaching a header to a broadcast object of a current broadcast cycle, said header defining a repetition distance which is a distance between the point at which the transmission of the current segment of the broadcast object and the next transmission of a next segment of the broadcast object will be completed; and

transmitting the broadcast object along with its header in the broadcast channel from the server side to the receiver side.

15. (Previously Presented) The method according to claim 14, characterized in that said repetition distance specifies how many of the plurality of broadcast objects will be transmitted after a specific broadcast object until the specific broadcast object will be transmitted again.

16. (Previously Presented) The method according to claim 14, characterized in that said repetition distance specifies how much data will be transmitted after a specific broadcast object until the specific broadcast object will be transmitted again.

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17. (Previously Presented) The method according to claim 14, characterized in that said repetition distance specifies how much time will elapse after a specific broadcast object is broadcast until this specific broadcast object will be transmitted again.